

Application/Control Number: 10/645,308
Art Unit: 2814

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DETAILED ACTION

REASONS FOR ALLOWANCE

Claims 1-14 and 17-31 are allowed. *← This is correct*

The following is an examiner's statement of reasons for allowance:

The prior art of record fail to disclose the combination of all the limitations recited, including a first non-porous via level low-k dielectric layer having thereon metal via conductors with a bottom portion and sidewalls; an etch stop layer; a first porous low-k line level dielectric layer having thereon metal line conductors with a bottom portion and sidewalls; a second thin non-porous low k dielectric layer for coating and planarizing the line and via sidewalls; and a liner material between the metal via and line conductors and the dielectric layers wherein the second thin non-porous low-k dielectric layer has a composition that is covalently bonded with the first non-porous via level low-k dielectric layer and the first porous low-k line level dielectric layer for enhanced adhesion; and wherein the second thin non-porous low-k dielectric layer is selected from the group consisting of: HOSP™, HOSP BEST™, Ensemble™ Etch Stop, Ensemble™ Hard Mask, AP 6000™, organo silsesquioxanes, hydrido-organosilsesquioxanes, siloxanes, silicon oxides, SiLK™, GX-3™ and a combination thereof.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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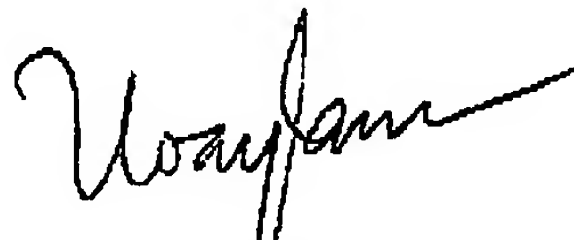
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DiLinh Nguyen whose telephone number is (571) 272-1712. The examiner can normally be reached on 8:00AM - 6:00PM (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DLN


HOAI PHAM
PRIMARY EXAMINER